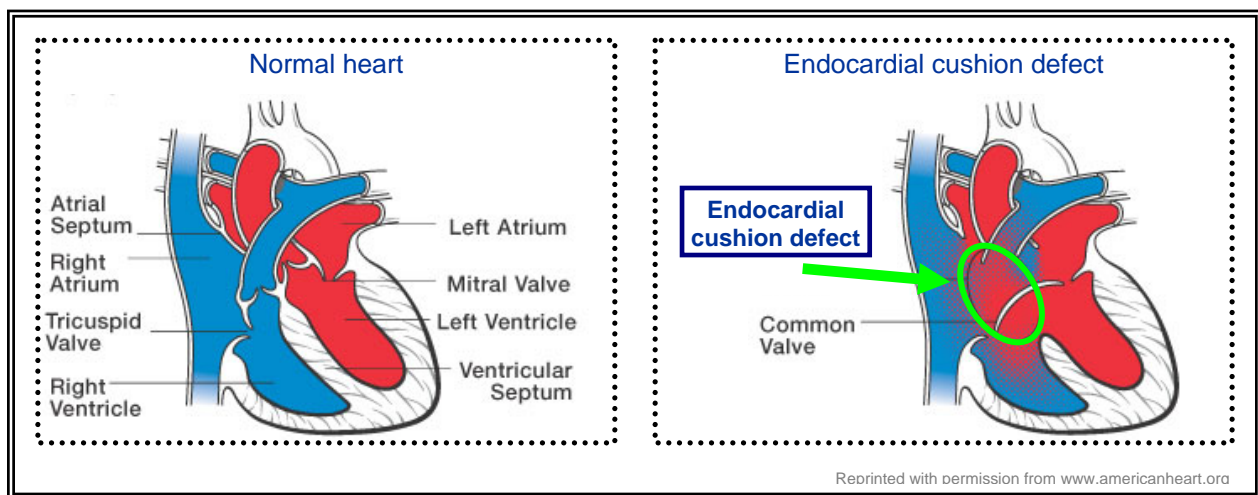


# Endocardial Cushion Defects

## What are endocardial cushion defects?

**Endocardial cushion defects** (also known as **atrioventricular canal** or **atrioventricular septal** defects) are a group of heart defects characterized by involvement of the **atrial septum** (opening between the two upper chambers of the heart), the **ventricular septum** (opening between the two lower chambers of the heart), and one or both of the **atrioventricular valves** (openings between the upper and lower chambers of the heart). This group of defects occurs due to abnormal development of the **endocardial cushion** (portion of the heart that appears early in development of a baby's heart).

These abnormalities can be further divided into **complete** or **partial** defects; complete defects are more severe than partial defects. The severity of the symptoms associated with the endocardial cushion defect depends on the size of the heart defect. Complete endocardial cushion defects are more common in children with Down syndrome. Approximately 3% of all children with congenital (present at birth) heart defects have endocardial cushion defects.



## What causes endocardial cushion defects?

Currently, the exact cause of endocardial cushion defects is not known. Heredity likely plays a role in the development of all heart defects, meaning that if someone had a congenital heart defect, he or she has an increased chance of having a child with a heart defect.

## How are endocardial cushion defects treated?

Endocardial cushion defects can be surgically corrected. The openings in the atrial and ventricular septums are closed, and any abnormalities of the valves are also corrected.

## For more information

**American Heart Association** - <http://www.americanheart.org/presenter.jhtml?identifier=11105>

**Cincinnati Children's Hospital Medical Center's Heart Center Encyclopedia** -

<http://www.cincinnatichildrens.org/health/heart-encyclopedia/default.htm>

**MedlinePlus** - <http://www.nlm.nih.gov/medlineplus/congenitalheartdefects.html>

**National Heart Lung and Blood Institute** - [http://www.nhlbi.nih.gov/health/dci/Diseases/chd/chd\\_what.html](http://www.nhlbi.nih.gov/health/dci/Diseases/chd/chd_what.html)

**Sources:** Cincinnati Children's Hospital, American Heart Association